## **ABSTRACT**

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## Waste gas purification structure with circulated filtering and coating

The present invention discloses a cross-meshed waste gas purification structure with circulated filtering and coating that is comprised of a filter, a support axle, a bearing housing, a motive rod, a chest base, and a motor; wherein a bearing is pivotally coupled to each of both ends of the support axle, and the two bearing housings are disposed in the chest base with an appropriate distance apart, set at a different height with the bearing housing fixed on the opposite side of the housing, such that each of both sides has a support axle with different heights with each other to allow a S-shaped filter to move along and facilitate the filter to be fixed to the intersection of both sides for collecting paint and dust. The meshes on both sides of the S-shaped track circulation completely stick the dust or residue into the aperture to increase the storage area, and thus accomplishing a complete purification function and attaining the practical effect of purifying the air by the meshed cross circulation on both sides. The waste gas purification structure in accordance with this invention can be disposed and incinerated after its use without the need of cleansing the tank that may pollute the water source. The present invention is definitely a pioneering work for industrial waste gas treatment.